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**A. GS1 Related**

**Category: SOCIAL ISSUES**

**1. Arbitrary ban on social media will impede FDI**

**Context:**

- The Madras High Court asked the Tamil Nadu government on April 3 to ban TikTok, saying it encouraged pornography and warning that sexual predators could target child users.
- Chinese video app TikTok is no longer available in Google and Apple app stores in India after the Madras High Court prohibited its downloads, a setback for developer ByteDance Technology's efforts to tap users in a key market.

### What is TikTok?

- TikTok is an app that allows users to create and share short videos with special effects.
- The app was developed by Chinese Internet technology company ByteDance.
- It has over 54 million monthly active users in India.

### Why is TikTok banned in India?

- Despite TikTok being very popular in India, it was argued that its content is inappropriate.
- Several users have reported endemic cyberbullying on TikTok, including racial abuse.
- Jokes, clips and footage related to India's thriving movie industry dominate the app's platform, along with memes and videos in which youngsters, some scantily clad, lip-sync and dance to popular music.
- Among many reasons for the ban as quoted by the Madras High Court are concerns of availability of pornographic content, exposure of children to sexual predators, people being made subject to mockery and pranks, violation of privacy and its addictive tendency among teenagers.
- According to an IT ministry official, the government sent a letter requesting Apple and Google to abide by the state court's order.
- Google blocked access to TikTok in its Play store in India to comply with the court's directive. The app is currently not available in mobile app stores.
- ByteDance challenged the TN court's ban order in Supreme Court saying it went against freedom of speech rights in India. The Supreme Court is yet to hear the case.
- The legal action against ByteDance could set a precedent of Indian courts intervening to regulate content on social media and other digital platforms.

### Issue:

- Any "arbitrary" ban on social media platforms and intermediaries could impede foreign direct investment and affect expansion of the digital India initiative, an industry body of Internet and mobile device companies said.
- The Internet and Mobile Association of India (IMAI) said it would be a major roadblock to the growth of digital India and impede FDI in digital if intermediaries were to be banned quite arbitrarily by the courts in the country.
- The association was of the view that such bans dilutes the safe harbour provisions currently contained in the IT Act and its Rules and make it impossible for them to operate in the country.
- Especially affected would be the so-called social media platforms which allow citizens to express themselves

### Way forward:

Content moderation on user-generated platforms is a major challenge. Such challenges must be constantly addressed with improving mechanisms along with enhanced safety features such as increased privacy settings, in-app reporting, comments filter, content filter for younger users, in-app access to Community Guidelines, online safety resources etc.

## Category: POLITY AND GOVERNANCE

### 1. Is the EC free enough to play fair?

#### Context:

- The run-up to the 2019 general election has seen several violations of the Model Code of Conduct.
- The Election Commission of India (EC) admitted to the Supreme Court that it was “toothless”, and did not have enough powers to deal with inflammatory or divisive speeches in the election campaign.
- On April 16, it imposed campaign bans, ranging from two to three days, on some political leaders, including Mayawati and Yogi Adityanath.

#### From where does the EC derive its powers and what is its extent?

- The Election Commission of India is a creation of the Constitution.
- Article 324 says the superintendence, direction and control of all elections to Parliament, the State legislatures, and the offices of the President and Vice-President shall be vested in the EC.
- The Article has been interpreted by courts and by orders of the EC from time to time to mean that the power vested in it is plenary in nature.
- It is seen as unlimited and unconditional in the matter of holding elections.
- In other words, the EC can take any action it deems fit to ensure that elections and the election process are free and fair.
- The independence of the EC is preserved by clauses in the Constitution that say the Chief Election Commissioner cannot be removed from office except in the manner provided for the removal of a Supreme Court judge and that the conditions of his service cannot be varied to the incumbent's disadvantage after appointment.

#### Has the EC always been a multi-member body?

- No, the Election Commission was helmed by a single Chief Election Commissioner for decades since the body was set up in 1950 based on the provisions of the Constitution.
- It was on October 16, 1989, that two more Election Commissioners were appointed to expand the panel's composition. Their tenure ended in 1990.
- Thereafter, two Election Commissioners were appointed in 1993. Since then, the EC has been a three-member panel, with a Chief Election Commissioner and two Election Commissioners.
- Decision-making within the panel is by majority.
- While the CEC can only be removed in the manner set out for a Supreme Court judge, the other two Commissioners may be removed on the recommendation of the CEC.
- In 1995, the Supreme Court held that the Election Commissioners are on a par with the CEC and the latter is not superior in standing with the other Commissioners.
- The EC has been demanding that the protection and safeguards given to the CEC under the Constitution should also be extended to the other Election Commissioners.

#### What kind of control does the EC have over civil servants during an election?

- As the superintendence and control over all aspects of the election process is vested in the EC, it exercises direction and control over civil servants deployed for election-related work. This means that bureaucrats engaged in the administrative aspects of elections, including police officers with law and order duties, are also amenable to the EC's jurisdiction.
- This power enables the EC to monitor both the manner in which civil servants perform their election-related duties, and prevent activities which may be seen as partisan.

- The EC often cites its vast powers under Article 324 to transfer or suspend officials during election time, even though they normally come under the disciplinary purview of the government of India or the State governments. There have been instances of the EC transferring not only Returning Officers, but also Commissioners of Police and Superintendents of Police.
- Example: On April 5, the EC transferred Kolkata Police Commissioner Anuj Sharma and three other top police officers. The normal reasons cited are to prevent these civil servants from aiding any political party and to ensure a level-playing field for all contestants.

### **What are the possible actions it can take against candidates and parties?**

- The EC monitors the adherence of political parties and candidates to the 'Model Code of Conduct'.
- The code is a set of norms laid down by the EC, based on a consensus among political parties, spelling out the dos and don'ts for elections. However, it does not have statutory value, and it is enforced only by the moral and constitutional authority of the EC.
- If the violations are also offences under election law and the criminal law of the land, the EC has the power to recommend registration of cases against the offenders.
- However, for some violations — such as canvassing for votes during a period when electioneering is barred, making official announcements while the MCC is in force, and making appeal to voters on sectarian grounds — the EC has the power to advise or censure candidates, in addition to directing registration of cases.
- In some cases, as recent incidents would show, the EC may bar candidates or leaders from campaigning for specified periods.
- Asking individuals to leave a constituency or barring entry into certain areas are other powers that the EC may exercise. These powers are not necessarily traceable to any provision in law, but are generally considered inherent because of the sweeping and plenary nature of the EC's responsibility under the Constitution to ensure free and fair elections.
- Its powers extend to postponing elections to any constituency, cancelling an election already notified, and even to abrogate or annul an election already held.
- While postponement on the grounds of rampant bribery of voters has been done on a few occasions, the resort to the grave action of rescinding the notification for a Lok Sabha constituency happened in Vellore in the current general election.
- Earlier, by-elections had been called off on similar grounds. In March 2012, the Election Commission cancelled a Rajya Sabha election in Jharkhand after polling was completed, following the emergence of evidence that candidates were bribing voters.

### **What are the limitations of the EC's powers?**

- The EC does not have the power to disqualify candidates who commit electoral malpractices. At best, it may direct the registration of a case.
- The EC also does not have the power to deregister any political party. However, the Constitution empowers the EC to decide whether a candidate has incurred disqualification by holding an office of profit under the appropriate government, or has been declared an insolvent, or acquired the citizenship of a foreign state.
- When a question arises whether a candidate has incurred any of these disqualifications, the President of India or Governor has to refer it to the EC. The poll panel's decision on this is binding.

## **C. GS3 Related**

**Category: ECONOMY**

## 1. 15 injured as train derails in U.P.

### Context:

- Fifteen persons were injured when 12 coaches of the Howrah-New Delhi Poorva Express derailed near Kanpur in Uttar Pradesh.
- The train was going to New Delhi when the incident occurred.
- Four out of the 12 derailed Linke Hofmann Busch (LHB) coaches had overturned.

### Issue:

Frequent railway accidents have reignited debates regarding the efficiency of Indian Railways. Every year, hundreds of minor and major accidents keep happening and we tend to look for scapegoats instead of finding a common thread among all the issues Indian Railways is facing.

### Recommendations of various Committees:

- The Bibek Debroy Committee and Anil Kakodkar Committee have given various recommendations for reforming railways.
- While Bibek Debroy Committee gave recommendations on Restructuring of Indian Railways, Anil Kakodkar Committee was set up to submit a report and recommendations on Railway Safety.

### Highlights of Recommendations by Anil Kakodkar Committee:

The Committee had made various recommendations covering various aspects viz. General Safety Matters, Organizational Structure, Empowerment at Working Level, Safety Related Works and Issues, Filling up of vacancies in critical safety categories and Manpower Planning Issues, Plugging the shortage of critical Safety Spares, External Interferences – Removal of Encroachment and Sabotage, Upgradation of Signaling, Telecommunication and Train Protection System, Upgradation of Rolling Stock, Track, Bridges, Elimination of Level Crossings, Human Resource Development with emphasis on Education and Training Institutes on Indian Railways, Eco-system and Safety Architectures on Indian Railways.

- Need for an independent body like Railway Safety Authority under the government with chairman and experts from outside.
- Complete elimination of both manned and unmanned level.
- Need for advanced signalling system based on continuous track circuiting and cab signalling similar to European train control system Level-II on the entire trunk route of about 19,000 route kilometres.
- Continuous monitoring of all the bridges in terms of scientific measurements of deflections/displacements, water level and flow velocity on a continuous basis and data should be communicated to the office of the concerned Chief Bridge Engineer for monitoring.
- A robust and powerful Safety Architecture should be there to have a safety oversight on the operational mode of Railways.

### Way forward:

- Making way for LHB (Linke Hofmann Busch) coaches instead of ICF (Integral Coach Factory) bogies on the lines of Shinkansen of Japan.
- Incorporating technologies like ultrasound flaw detection machines to reduce accidents, anti collision devices, artificial intelligence to make the flow of information free from human intervention as most of the accidents are caused by the manned and unmanned crossings and poor technological retrofitting. Indian railway still relies on track-men for track repair and maintenance, prone to human error in this era of innovation.
- Existing unhygienic situation by direct discharging of excreta, which also corrode the rails, thereby making the route more unsafe, should be replaced completely by bio-toilets.



- Urgent need of an empowered safety regulator that prioritizes safety. Lateral entry of specialized officer will go a long way in ensuring railway's betterment.
- Need to execute route decongestion and laying of new tracks on mission mode.
- Raise awareness about the Indian railways insurance programme of Rs.0.9 per ticket by proactive promotion.
- Primary emphasis should be given to upgrading of age old tracks to make them accidents free.

## **Category: ENVIRONMENT AND ECOLOGY**

### **1. Over one lakh Olive Ridley turtles enter sea in Odisha**

#### **Context:**

The idyllic Kalam Island off the Odisha coast has become lively with lakhs of baby Olive Ridley turtles crawling towards the Bay of Bengal after emerging from eggshells.

#### **Details:**

- Odisha is home to 50 percent of the total world's population of Olive Ridleys and about 90 percent of Indian population of sea turtles.
- The unmanned island, located close to the Wheeler's Island defence test range centre, a prohibited territory, is one of the largest rookeries in the world.
- Except forest department officials, no one has had the chance to witness the spectacular sight.

#### **Olive Ridley Turtles:**

- Gets name from its olive colored carapace, which is heart-shaped and rounded.
- Olive Ridley sea turtles come in large numbers for nesting to Odisha coasts. The mass nesting draws worldwide attention on the conservation of Olive Ridley in Odisha.
- The synchronised nesting in mass numbers is called Arribadas.
- They are mostly carnivorous and feed on jellyfish, snails, crabs, and shrimp. They occasionally consume algae and seaweed.
- The major breeding ground for these turtles is Rushikulya (Odisha), Dharma (Odisha), Devi estuary (Odisha), Astaranga Coast (Odisha), Gahirmatha beach (Odisha) and Hope Island of Coringa Wild life Sanctuary (Andhra Pradesh).
- They are classified as Vulnerable — IUCN Red List.

### **2. Indoor emissions affect air-quality standards**

#### **Issue:**

Indoor air pollution accounted for 40% of PM 2.5 pollution in the Gangetic basin.

#### **Details:**

- A recent study has pointed out that the use of firewood, kerosene and coal in the households contributed to about 40% of the PM 2.5 pollution in the Gangetic basin districts.
- This number varied across the country but household emissions remained one of the major culprits behind air pollution.
- The analysis was carried out by researchers from the Indian Institute of Technology (IIT), Delhi in collaboration with University of California in Berkeley, Urban Emissions, Delhi and the University of Illinois, Urbana-Champaign.
- In many villages, they still use firewood for room heating and water heating. People prefer cheap wood fuel despite LPG being provided to many households.

- The results showed that by eliminating household emissions the average outdoor air pollution levels could be reduced and brought within the national ambient air quality standards.
- The study notes that “if all households transitioned to clean fuels, about 13% of premature mortality in India could be averted.
- At the national scale, mitigating household emissions is also expected to bring large health benefits.

#### **Delhi needs special attention:**

- The study also highlighted the need for special attention in Delhi.
- In Delhi NCR, stubble burning, industrial and power plant emission, brick kilns and vehicular emissions are the major contributors.
- Even after mitigating household emissions, Delhi NCR would remain out of attainment.
- Delhi needs more serious and stringent measures.

#### **Way forward:**

India’s pollution problem is much bigger than often perceived. The study has demonstrated that mitigating at a household level is the easiest and more practical way out for the government to reduce not only the household pollution but also outdoor air pollution at the national scale. A multi-pronged approach to control emission from other major sectors like industries, transportation, and power plants to effectively address the air pollution issue is needed.

### **3. Indian bullfrogs take to invasive behaviour early in Andamans**

#### **Context:**

A study has found that the Indian bullfrogs introduced in the Andaman islands are invasive, and eat native wildlife including fish and lizards.

#### **Indian Bullfrog:**

- The Indian bullfrog (*Hoplobatrachus tigerinus*) is native to the Indian subcontinent.
- Also known as the Indus Valley bullfrog, Asia bullfrog, is a large species of frog found in mainland Myanmar, Bangladesh, India, Pakistan, Afghanistan, and Nepal.
- It has been introduced in Madagascar and India’s Andaman Islands where it is now a widespread invasive species.
- The bullfrogs are prolific breeders: they have short breeding seasons, and each egg clutch can contain up to 5,750 eggs.
- Its tadpoles are carnivorous and eat other tadpoles (including their own species).
- They prefer freshwater wetlands and aquatic habitats. Generally they avoid coastal and forest areas.

#### **Invasive Species:**

A species is considered invasive when it reproduces and spreads successfully in a non-native area, where it may have harmful effects on native plants and animals.

#### **Details:**

- Indian bullfrog has rapidly invaded the Andaman islands after it was introduced there in the early 2000s.
- In human-dominated areas, it now shares space with other native (and often endemic) frog species.
- The ecologists find that the frog was introduced to the islands from mainland India (most probably from West Bengal). From there, it journeyed to several islands in the archipelago, aided by people.
- While most amphibians cannot cross salt water naturally, this frog was dispersed by humans.

- Local people also say that bullfrog tadpoles were accidentally mixed with fish fingerlings, which are traded and reared in many of the roughly 3800 ponds of the archipelago. This may have been a major cause for their massive spread.
- A majority of the local people who the researchers surveyed reported that the frog caused economic loss, as it is preys on reared fish and poultry.
- Despite this, humans intentionally spread this invasive species within and between islands.
- Now, experiments reveal that the frogs take to this invasive behaviour early in their lives.
- Even in the developmental stages, the large bullfrog tadpoles eat other native frog tadpoles.
- The results of a study published in *Biological Invasions*, reveal that Indian bullfrog tadpoles – which grew to be the largest (around 20 millimetres) – also grew the fastest.
- The survival of both endemic frog tadpoles reduced to zero when bullfrog tadpoles were present.
- In the three-species treatment too, all individuals of the endemic frog tadpoles in most pools were eaten by bullfrog tadpoles within the first week itself.
- The proportion of bullfrog tadpoles surviving was greater in the presence of both endemic frog tadpoles.
- This is worrying because other native frog species – many of which are only being described – could also be affected.
- Humans play a huge role in the invasive success of these frogs and urgent management actions including screening at ports of entry could help prevent their spread to other islands, the study said.

## Category: SCIENCE AND TECHNOLOGY

### 1. In a first, IISc team directly delivers protein into cells

#### Context:

In a breakthrough that might have huge medical implications, researchers at Bengaluru's Indian Institute of Science (IISc) have used a novel strategy to directly deliver proteins into mammalian cells.

#### Details:

- Proteins are big molecules and so cannot enter the cells on their own.
- So a team from IISc substituted a hydrogen atom of the protein with an iodine atom to achieve a nearly sixfold increase in protein uptake by cells.
- The increased protein uptake was seen even when the molecular weight of the protein was 28,000 dalton, meaning the protein was much bigger in size than most of the therapeutic small molecules.
- The results were published in the journal *Angewandte Chemie*.
- Other researchers have tried tagging the protein with cell-penetrating peptides, supercharged proteins and even used virus-like particles to ferry the proteins into cells.
- But these approaches have severe limitations including altering the protein function inside the cell.
- For this reason, most of the applications involving proteins are directed to extracellular targets. Proteins inside the cells get impaired during diseased conditions such as neurodegenerative and cardiovascular disease. Supplementing the cellular protein in such cases becomes important and this is where the method used by the IISc team will come in handy.
- Since the iodinated amino acid is introduced on the surface of the protein, the secondary structure is not altered and so the protein remains functionally intact.
- Iodine forms a halogen bond with a specific receptor (caveolin) that transports the protein from the cell membrane surface to inside the cells.
- Compared with bromine and chlorine, iodine is heavier and so it forms a stronger halogen bond with the receptor. This might be responsible for more proteins getting into the cells when we substitute a



hydrogen with an iodine atom.

- The cells were healthy after taking up the protein. The morphology of the cells that had taken up the proteins did not change even at the end of 24 hours

## 2. MicroRNAs in the liver help regulate the feed-fast cycle

### Context:

- Researchers from Tata Institute of Fundamental Research (TIFR), Mumbai, have succeeded in identifying the mechanism that drives the feed-fast transition in the liver.
- They find that the oscillation in the levels of certain microRNAs in the liver drives this transition, and they study this by inhibiting the translation of the fasting responsive genes that are involved.
- The research has been published in *Cell Reports*.

### Details:

- A new discovery has shed light on small RNAs called microRNAs in the liver that regulate fat and glucose metabolism.
- Research shows that a molecular anticipation, during fast to re-feed transition, is essential for capping glucose production by the liver. This novel control enables a rapid switch in physiology following food consumption.
- Besides the therapeutic potential, the findings show that these mechanisms may be associated with metabolic diseases and aging.

### Feed-fast cycle:

- The feed-fast cycle is an important aspect of our body metabolism.
- There are four stages to it: fed state, post-absorptive state, fasting state, starvation state.
- Normally, we only experience the third stage and do not enter the fasting stage.
- Different organs in our body work to metabolise the food we consume, and they behave differently during each stage.
- The liver, for instance, is a central organ in maintaining glucose and fat metabolism both under fed and fasted conditions.
- During a fasting state, liver produces glucose in a process which is critical for maintaining circulating glucose levels.
- An abnormality in either of these processes can lead to diabetes, obesity or other liver diseases.
- There is evidence to show that aberrant molecular mechanisms that affect glucose and fat metabolism in the liver are the primary causes of several metabolic diseases and even ageing. Many of these occur due to aberrant gene expression and metabolic stress.
- While fasting can last from a few hours to days, feeding (or refeeding) is a rapid process that takes from a few minutes to perhaps an hour.
- Therefore, when going from fasting to feeding, the liver functions must switch rapidly.
- This entails stopping the mRNA translation of fasting-induced genes in a fed state.

## D. GS4 Related

*Nothing here for today!!!*

## E. Editorials

**Category: SOCIAL ISSUES**

## 1. Honour and Hypocrisy

*(Note: This analysis has been taken from a write-up featured in The New Indian Express on April 21, 2019)*

### Editorial analysis:

- As societies we place a disproportionately large premium on family honour, on how we look from the outside, on taboos, secrets and masks. Trained from childhood to safeguard the family name, it is unthinkable to even recognise restraints or a muffling of personal freedom. Only as adults does the recognition of unfairness set in and then too there is self-doubt, a fear of exaggeration.
- Memories are notorious for being manipulative, so we wait for the past to absolutely ambush us into insomnia and illnesses before we take the extraordinary step to speak out, to seek outside help—aware all the time of the grand betrayal at work, of disloyalty to own flesh and blood.
- From little girls being stoned to death for ‘provoking rape’ to murdering kin only because they love and lust out of the prescribed caste or gender, the crimes in the name of this paramount honour cover a rather grisly repertoire. In the victim’s view, if own family can’t stand by you, indeed can kill you in cold blood, then who to turn to? No police official, no doctor, no social worker can inspire trust when own uncles and dads come after you with scythes.
- Lene Wold, in her soon-to-be-released book *Inside an Honour Killing*, chronicles the story of Amina, shot in the face aged sixteen for supporting a gay sister who was killed by her father. ‘Baba’, who had strangled his mother to death when he was young because she ran away from home to escape an abusive husband, never regrets murdering for a moment.
- Siblings of Asian teenager Shafiea Ahmed, who was killed by her parents in 2003 in Warrington, England, won’t admit to witnessing the brutal act. A new documentary, *When Missing Turns Into Murder*, catalogues the events leading up to the arrest of the parents. ‘Westernisation’ seems to be why Shafiea was punished—for wearing sleeveless and texting boys.
- Reshma Qureshi, an acid attack victim at seventeen, whose story is chronicled by her with Tania Singh in *Being Reshma*, remembers the incident as a blur, but one of intense and continuous pain. No one, she says, came to her rescue. And finally when someone did, she hugged him so tight she burnt him a bit too. Her brother-in-law, blaming her for supporting her sister’s decision to leave him, had publicly flung acid at her face for the deep dishonour his wife’s leaving him would have brought upon him. A man who can’t keep his wife! It was important for him to assert his ‘manliness’.
- The 27-year-old woman in Srinagar, raped by her father, consumed poison and died. Except for a sister, who post her death spoke up, the lack of familial support was spectacular.

### Conclusion:

The heartening note—if one can see any silver lining in these sad, sad cases—is that while families and neighbours aided and abetted these brutalities, it was eventually a sister standing up for her, sister that brought most crimes to light. Even as mothers exhorted fathers to rein in the wayward daughters, siblings did not keep their mouth shut. If Shafiea’s sister, Alisha, had not testified against her parents even as other siblings chose silence, they would still be out there ‘protecting’ their children by homicide.

## Category: ENVIRONMENT AND ECOLOGY

### 1. Follow Sustainable Development Model

*(Note: This analysis has been taken from a write-up featured in The New Indian Express on April 21, 2019)*

### Editorial analysis:

- One of the most ubiquitous sights in any Indian city is the row of leaky water tankers carrying water from the suburbs to some posh apartment complex or residential colony. This is in stark contrast to the queues of ordinary citizens waiting with their colourful plastic buckets for the tanker to arrive.

Mumbai's reservoirs have only 26 per cent of water this year.

- If the situation in the cities is bad, the water crisis in the neglected hinterlands is beyond imagination. In peninsular India, almost 40 per cent of the districts are under severe water crisis. Kerala, which faced the flood of the century a few months ago, is reeling under water crisis. The situation is grim in Maharashtra, Tamil Nadu and Gujarat.
- It is an irony that India, which has over three months of wet season and countless perennial rivers, goes dry by December every year. We have become callous with the usage of water. We live as if there is no tomorrow in the usage of our natural resources.

### **Our unsustainable lifestyle:**

- Glass walls are a great thing to have in a cold country. It lets in enough heat and light, and keeps out the cold wind. In tropical and muggy Mumbai, glass walls and huge French windows create an oven-like effect. It keeps the breeze out and ensures enough heat in. So, we have no choice other than to use air conditioners. The more air conditioners the residents use, the more heat the urban areas generate, leading to a vicious cycle.
- For generations, we had considered having grass in our courtyard as something undesirable. In a country where poisonous snakes abound, grass was a great risk too. In the tropical sun, maintaining a grass bed requires a huge quantity of water. Instead, we had huge trees that shaded our courtyards. Now, when we look around, we see lawns in both public and private places.
- For the sake of maintaining lawns, we often cut fruit-bearing trees. Fruit-bearing trees attract birds and who has the time to clean the bird shit? Instead, it is easy to hire an agency that would use gallons of water to water the lawns and keep the grass intact. This goes well with the foreign-sounding names that the builders give for the apartments and villas of the aspiring middle class.
- The usage of concrete, aluminium and steel for construction is unsustainable in the long run. The amount of water required for every construction is huge. Same is the case for industrial production of steel, bricks, cement etc., not to say about the sand mining. There isn't much of reusable material from a demolished concrete building.
- In the rural area, thanks to power subsidy and minimum support price for crops, we have given birth to unnatural farming practices. In arid regions, we are cultivating crops like paddy or sugarcane, spending huge resources while in traditional paddy growing regions, the farming has shifted to more lucrative cash crops. We give free power for pumping out groundwater, leading to a never-ending race for digging deeper and deeper bore wells. Apart from this, huge quantities of water, sand, granite, marble etc., are transported from rural areas to the burgeoning cities, resulting in collapse of traditional farming. It is lucrative to mine the hill instead of cultivating it.

### **Conclusion:**

- In our craze for mindless development, we have devoured many hills and mountains for rocks. India is going through a phase of huge transformation. We are catching up with the developed countries through large-scale investment in infrastructure. But if we follow the same model of development that the West followed, we wouldn't be able to sustain and survive for long. The great American and European dreams were built on slavery, colonisation, ruthless exploitation of natural resources and perpetual wars.
- We neither desire, nor can we afford to have this development model. The vehicle density in the US is 833 per thousand people. India, despite its rapid development in the past two decades, has a density of 22 per thousand. With this density itself, we have absolute chaos and nightmarish traffic jams on our roads. If we follow the US dream and reach the same vehicle density in the next 20 years, that would be over 125 crore vehicles on our streets instead of the present three crore. Imagine the resources needed to build the infrastructure for these many vehicles, and the unimaginable fuel to run these vehicles.
- Ironically, even a city like Mumbai has shown scant interest in using the sea for intra-city transport

instead of the crowded local trains and congested roads. We are blessed with a huge coastline peppered with many major cities. In the heartland, we have many rivers and cities dotting the river banks. Instead of trying to build huge roads connecting these cities, we need to invest more in the water transportation which has a minimum impact on infrastructure.

- With so much rainfall, there is nothing but greed and carelessness that stops each city to have its own water bodies and solar farms. No residential colonies or apartments should be allowed to bring water in tankers. If the residents can afford houses worth many times the average per capita income of an Indian, they can afford to pay a little extra for sustainable water source inside their colony or town too. Unless we stop imitating the development model that worked for the West in the previous century and follow sustainable development model, we are staring at a crisis of Himalayan proportions.

## F. Tidbits

### 1. Green vote

- A 46.5-sq ft model eco-friendly polling booth set up using bamboo and coconut fronds near the Civil Station in Palakkad by the Suchitwa Mission and the Haritha Keralam Mission.
- The model code of conduct of the Election Commission advises conduct of elections in an environment-friendly manner.
- **Haritha Keralam** is an Umbrella Mission integrating the components of Waste Management, Organic Farming, Water Resources Management. It has an ambitious outlook to address the issues of piling waste, impending drought and health hazards due to the consumption of pesticide treated vegetables and in general, the agricultural dependency of the State.
- It is one of the four mega missions announced by the government of Kerala, which emphasize on pro people alternative mode of development.
- **Suchitwa Mission**, under the Local Self Government Department, is responsible for evolving implementation strategy, providing policy in the sector of various waste management issues (solid and liquid) and has been functioning as the nodal agency for assisting Cities, Municipalities and Panchayats in all waste management aspects.
- Suchitwa Mission (SM) was formed by integrating the Kerala Total Sanitation and Health Mission (KTSHM) and Clean Kerala Mission (CKM)., Malinya Mukta Keralam (MMK) a comprehensive action plan, has been prepared for tackling the issues and challenges in the seven components of sanitation accepted universally, i.e., safe disposal of human excreta, home sanitation and food hygiene, personal hygiene, solid waste management, liquid waste management, safe handling of drinking water and community environmental sanitation.

## G. Prelims Facts

*Nothing here for today!!!*

## H. Practice Questions for UPSC Prelims Exam

### 1) Consider the following statements:

1. Bureau of Energy Efficiency is a statutory body under the Ministry of Power
2. BEE assists in developing policies and strategies with the primary objective of reducing the energy intensity of the Indian economy.

Which of the given statement/s is/are correct?

1. 1 only
2. 2 only

3. Both 1 and 2
4. Neither 1 nor 2

Answer: c

Explanation:

It is a statutory body under the Ministry of Power, created under the provisions of the Energy Conservation Act 2001. It assists in developing policies and strategies with the primary objective of reducing the energy intensity of the Indian economy. It co-ordinates with designated consumers and designated agencies to identify and utilize the existing resources and infrastructure, in performing the functions assigned to it under the Energy Conservation Act.

**2) Consider the following statements:**

1. UN Environment Assembly (UNEA) is the world's highest-level decision-making body on the environment.
2. UNEA is the governing body of the UN Environment Programme (UNEP)
3. UNEA meets annually

Which of the given statement/s is/are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. All of the above

Answer: a

Explanation:

The Environment Assembly meets biennially to set priorities for global environmental policies and develop international environmental law.

**3) Consider the following statements with respect to World Meteorological Organization (WMO)**

1. Its secretariat is headquartered in Geneva
2. India is a member of WMO

Which of the statement/s is/are correct?

1. 1 only
2. 2 only
3. Both 1 and 2
4. Neither 1 nor 2

Answer: c

Explanation:

WMO It is an intergovernmental organization which originated from the International Meteorological Organization. It provides world leadership and expertise in international cooperation in the delivery and use of high-quality, authoritative weather, climate, hydrological and related environmental services by its Members, for the improvement of the well-being of societies of all nations.

**4) The Gini coefficient measures:**



- a. Income inequality
- b. Inflation
- c. Unemployment
- d. Economic Growth

Answer : a

Explanation:

The Gini coefficient measures income inequality.

## I. UPSC Mains Practice Questions

1. Coffee production in India has seen a consistent decline. What are the reasons? What steps have been taken by the government to increase production? (15 Marks)
2. India's pollution problem is much bigger than often perceived. While the government data shows that six crore households have received a connection through the Ujjwala scheme, people still prefer wood fuel. What are the reasons? Explain the harmful effects of indoor pollution. (15 Marks)